

WHAT IS CLAIMED IS:

1. A method for performing compression, comprising:

5 receiving at a compressor a flow comprising a plurality of packets, each packet having a packet identifier, the packet identifiers associated with a predetermined increment;

ignoring a change in the predetermined increment associated with the packet identifiers;

10 compressing the plurality of packets; and  
transmitting the flow to a decompressor.

2. The method of Claim 1, further comprising:

receiving the flow at the decompressor, each packet 15 of the flow having a sequence number;

detecting a skip in the sequence numbers of the plurality of packets of the flow; and

accepting the flow having the skip in the sequence numbers.

20 3. The method of Claim 1, further comprising:

determining that an inactive time associated with the flow has exceeded a maximum allowed inactivity period, the flow having a context identifier;

25 establishing that the flow comprises a compressed packet in the place of a full header packet; and

establishing that the full header packet is lost.

4. A system for performing compression, comprising:

a compressor operable to:

5 receive a flow comprising a plurality of packets, each packet having a packet identifier, the packet identifiers associated with a predetermined increment;

ignore a change in the predetermined increment associated with the packet identifiers;

10 compress the plurality of packets; and  
transmit the flow; and

a decompressor coupled to the compressor operable to decompress the flow.

15 5. The system of Claim 4, the decompressor further operable to:

receive the flow, each packet of the flow having a sequence number;

20 detect a skip in the sequence numbers of the plurality of packets of the flow; and

accept the flow having the skip in the sequence numbers.

25 6. The system of Claim 4, the decompressor further operable to:

determine that an inactive time associated with the flow has exceeded a maximum allowed inactivity period, the flow having a context identifier;

30 establish that the flow comprises a compressed packet in the place of a full header packet; and  
establish that the full header packet is lost.

7. Logic for performing compression, the logic embodied in a medium and operable to:

receive at a compressor a flow comprising a plurality of packets, each packet having a packet identifier, the packet identifiers associated with a predetermined increment;

ignore a change in the predetermined increment associated with the packet identifiers;

compress the plurality of packets; and

transmit the flow to a decompressor.

10

8. The logic of Claim 7, further operable to:

receive the flow at the decompressor, each packet of the flow having a sequence number;

detect a skip in the sequence numbers of the plurality of packets of the flow; and

accept the flow having the skip in the sequence numbers.

20

9. The logic of Claim 7, further operable to:

determine that an inactive time associated with the flow has exceeded a maximum allowed inactivity period, the flow having a context identifier;

establish that the flow comprises a compressed packet in the place of a full header packet; and

establish that the full header packet is lost.

25

10. A method for performing compression, comprising:

receiving a previous flow at a decompressor, the previous packet flow associated with a context 5 identifier;

determining that a previous inactive time of the previous flow has exceeded an expiration period;

establishing that the context identifier has expired;

10 receiving a compressed packet associated with the context identifier, the compressed packet received in the place of a full header packet corresponding to the context identifier; and

15 establishing that the full header packet is lost in response to receiving the compressed packet.

11. The method of Claim 10, wherein the context identifier is assigned to the flow by determining at a 20 compressor that the previous inactive time of the previous flow associated with the context identifier has exceeded a previous maximum allowed inactivity period.

12. The method of Claim 10, further comprising:  
determining at a compressor that the previous  
inactive time of the previous flow associated with the  
context identifier has exceeded a previous maximum  
5 allowed inactivity period;

establishing that the context identifier is  
available;

10 assigning the context identifier to the flow in  
response to establishing that the context identifier is  
available; and

sending the flow to the decompressor.

13. The method of Claim 10, further comprising:

determining at a compressor that the previous  
15 inactive time of the previous flow associated with the  
context identifier has exceeded a previous maximum  
allowed inactivity period, the previous inactive time  
exceeding the previous maximum allowed inactivity period  
prior to exceeding the expiration period; and

20 establishing that the context identifier is  
available.

14. The method of Claim 10, further comprising:

25 establishing that the context identifier is  
available;

assigning the context identifier to the flow;

appending the full header corresponding to the  
context identifier to the flow; and

sending the flow to the decompressor.

15. A system for performing compression, comprising:

a buffer of a decompressor operable to receive a previous flow, the previous flow associated with a context identifier; and

5 a processor coupled to the buffer and operable to:

determine that a previous inactive time of the previous flow has exceeded an expiration period;

10 establish that the context identifier has expired;

receive a compressed packet associated with the context identifier, the compressed packet received in the place of a full header packet corresponding to the context identifier; and

15 establish that the full header packet is lost in response to receiving the compressed packet.

20 16. The system of Claim 15, wherein the context identifier is assigned to the flow by determining at a compressor that the previous inactive time of the previous flow associated with the context identifier has exceeded a previous maximum allowed inactivity period.

17. The system of Claim 15, further comprising a compressor operable to:

determine that the previous inactive time of the previous flow associated with the context identifier has exceeded a previous maximum allowed inactivity period;

5 establish that the context identifier is available;

assign the context identifier to the flow in response to establishing that the context identifier is available; and

10 send the flow to the decompressor.

18. The system of Claim 15, further comprising a compressor operable to:

determine that the previous inactive time of the previous flow associated with the context identifier has exceeded a previous maximum allowed inactivity period, the previous inactive time exceeding the previous maximum allowed inactivity period prior to exceeding the expiration period; and

20 establish that the context identifier is available.

19. The system of Claim 15, further comprising a compressor operable to:

establish that the context identifier is available;

25 assign the context identifier to the flow;

append the full header corresponding to the context identifier to the flow; and

send the flow to the decompressor.

20. Logic for performing compression, the logic embodied in a medium and operable to:

receive a previous flow at a decompressor, the previous flow associated with a context identifier;

5 determine that a previous inactive time of the previous flow has exceeded an expiration period;

establish that the context identifier has expired;

receive a compressed packet associated with the context identifier, the compressed packet received in the 10 place of a full header packet corresponding to the context identifier; and

establish that the full header packet is lost in response to receiving the compressed packet.

15 21. The logic of Claim 20, wherein the context identifier is assigned to the flow by determining at a compressor that the previous inactive time of the previous flow associated with the context identifier has exceeded a previous maximum allowed inactivity period.

20 22. The logic of Claim 20, further operable to:  
determine at a compressor that the previous inactive time of the previous flow associated with the context identifier has exceeded a previous maximum allowed 25 inactivity period;

establish that the context identifier is available;

assign the context identifier to the flow in response to establishing that the context identifier is available; and

30 send the flow to the decompressor.

23. The logic of Claim 20, further operable to:  
determine at a compressor that the previous inactive  
time of the previous flow associated with the context  
identifier has exceeded a previous maximum allowed  
5 inactivity period, the previous inactive time exceeding  
the previous maximum allowed inactivity period prior to  
exceeding the expiration period; and

establish that the context identifier is available.

10 24. The logic of Claim 20, further operable to:  
establish that the context identifier is available;  
assign the context identifier to the flow;  
append the full header corresponding to the context  
identifier to the flow; and  
15 send the flow to the decompressor.

25. A system for performing compression, comprising:

means for receiving a previous flow at a decompressor, the previous flow associated with a context identifier;

5 means for determining that a previous inactive time of the previous flow has exceeded an expiration period;

means for establishing that the context identifier has expired;

10 means for receiving a compressed packet associated with the context identifier, the compressed packet received in the place of a full header packet corresponding to the context identifier; and

means for establishing that the full header packet  
15 is lost in response to receiving the compressed packet.

26. A method for performing compression, comprising:

receiving at a compressor a flow comprising a plurality of packets, each packet having a packet identifier, the packet identifiers associated with a predetermined increment;

ignoring a change in the predetermined increment associated with the packet identifiers;

compressing the plurality of packets;

transmitting the flow to a decompressor;

receiving the flow at the decompressor, each packet of the flow having a sequence number;

detecting a skip in the sequence numbers of the plurality of packets of the flow;

accepting the flow having the skip in the sequence numbers;

determining that an inactive time associated with the flow has exceeded a maximum allowed inactivity period, the flow having a context identifier;

establishing that the flow comprises a compressed packet in the place of a full header packet; and

establishing that the full header packet is lost.

27. A method for performing compression, comprising:

5 determining at a compressor that a previous inactive time of a previous flow associated with a context identifier has exceeded a previous maximum allowed inactivity period;

establishing that the context identifier is available;

10 assigning the context identifier to a flow in response to establishing that the context identifier is available; and

appending a full header corresponding to the context identifier to the flow;

sending the flow to a decompressor;

15 determining at the decompressor that the previous inactive time of the previous flow has exceeded an expiration period, the previous inactive time exceeding the previous maximum allowed inactivity period prior to exceeding the expiration period;

20 establishing that the context identifier has expired;

receiving a compressed packet associated with the context identifier, the compressed packet received in the place of the full header packet corresponding to the 25 context identifier; and

establishing that the full header packet is lost in response to receiving the compressed packet.